

## Influenza Weekly Surveillance Bulletin

Northern Ireland, Weeks 42 - 43 (13 October – 26 October 2014)

### Summary

- Influenza activity in Northern Ireland remains at low levels.
- GP consultation rates for combined flu and flu-like illness (flu/FLI) remain below the updated pre-epidemic Northern Ireland threshold of 52.0 per 100,000 population at 10.3 and 11.3 per 100,000 population in weeks 42 and 43 respectively, with all indicators remaining at low levels.
- The OOH consultation rate for flu/FLI remained low in weeks 42 and 43 at 3.3 and 3.1 per 100,000 population respectively. The rate remained low in all age groups with the 45-64 years age groups showing a small but steady increase.
- RSV activity has remained low in weeks 42 and 43.
- There were no admissions to ICU with confirmed influenza reported in weeks 42 and 43, 2014.
- There were no deaths in ICU patients with laboratory confirmed influenza reported in weeks 42 and 43, 2014.
- There were no confirmed influenza outbreaks reported to PHA in weeks 42 and 43, 2014.
- In weeks 42 and 43, 2014 EuroMOMO did not report an excess in mortality.
- In weeks 42 and 43, 2014 there were fewer than five attendances for influenza like illness across the contributing emergency departments.

### Introduction

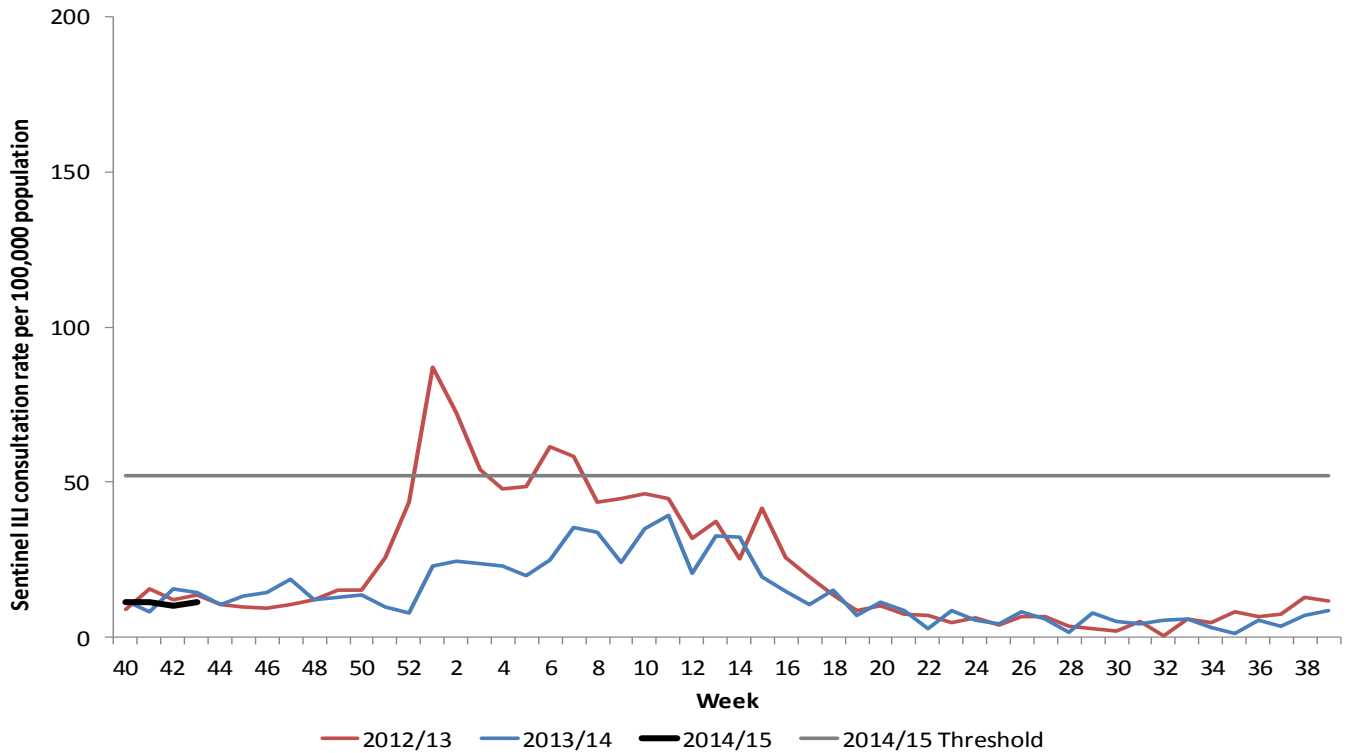
In order to monitor influenza activity in Northern Ireland a number of surveillance systems are in place.

Additional surveillance systems are:

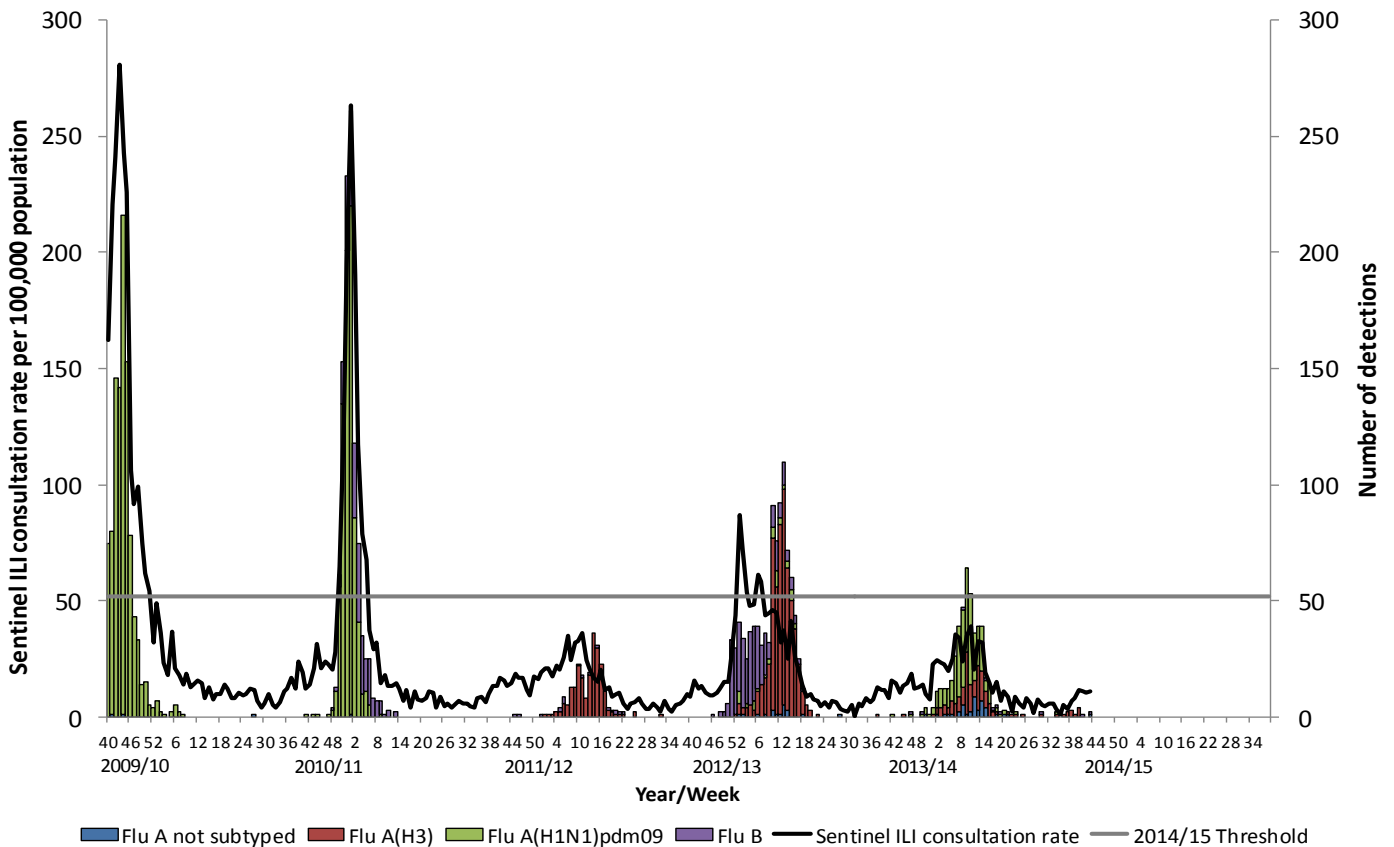
- GP sentinel surveillance representing 11.7% of Northern Ireland population;
- GP Out-of-Hours surveillance system representing the entire population;
- Virological reports from the Regional Virus Laboratory (RVL);
- Mortality data from Northern Ireland Statistics and Research Agency (NISRA);
- Excess mortality estimations are also provided by Public Health England using the EuroMOMO (Mortality Monitoring in Europe) model based on raw death data supplied by NISRA
- Critical Care Network for Northern Ireland reports on critical care patients with confirmed influenza.
- Emergency department syndromic surveillance system (EDSSS) which includes attendance data from 4 emergency departments in Northern Ireland.

## Sentinel GP Consultation Data

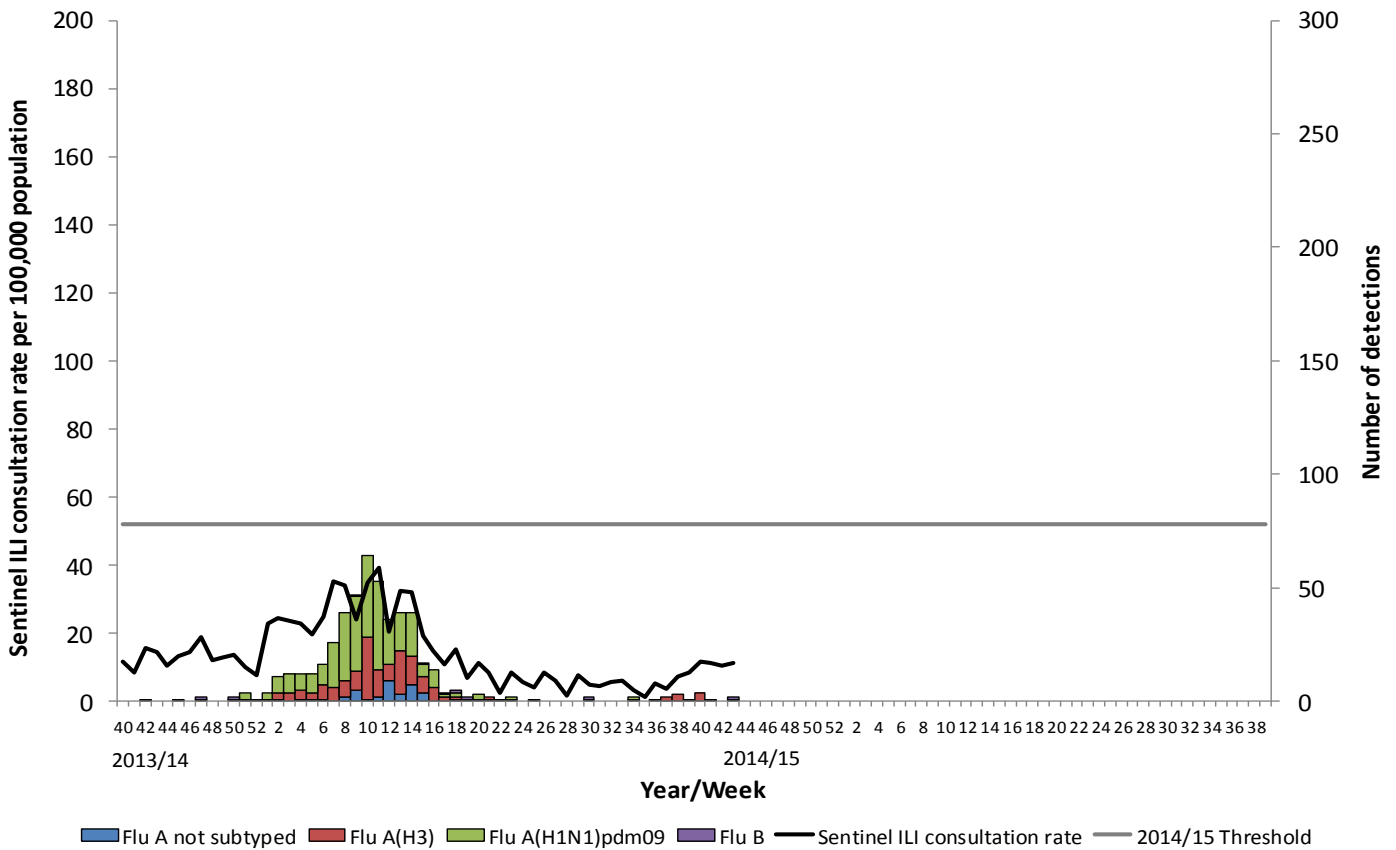
**Figure 1. Sentinel GP consultation rates for flu/FLI 2012/13 - 2014/15**



**Figure 2. Sentinel GP combined consultation rates for flu/FLI and number of influenza positive detections 2009/10 – 2014/15**



**Figure 3. Sentinel GP consultation rates for flu/FLI and number of virology 'flu detections from week 40, 2013**

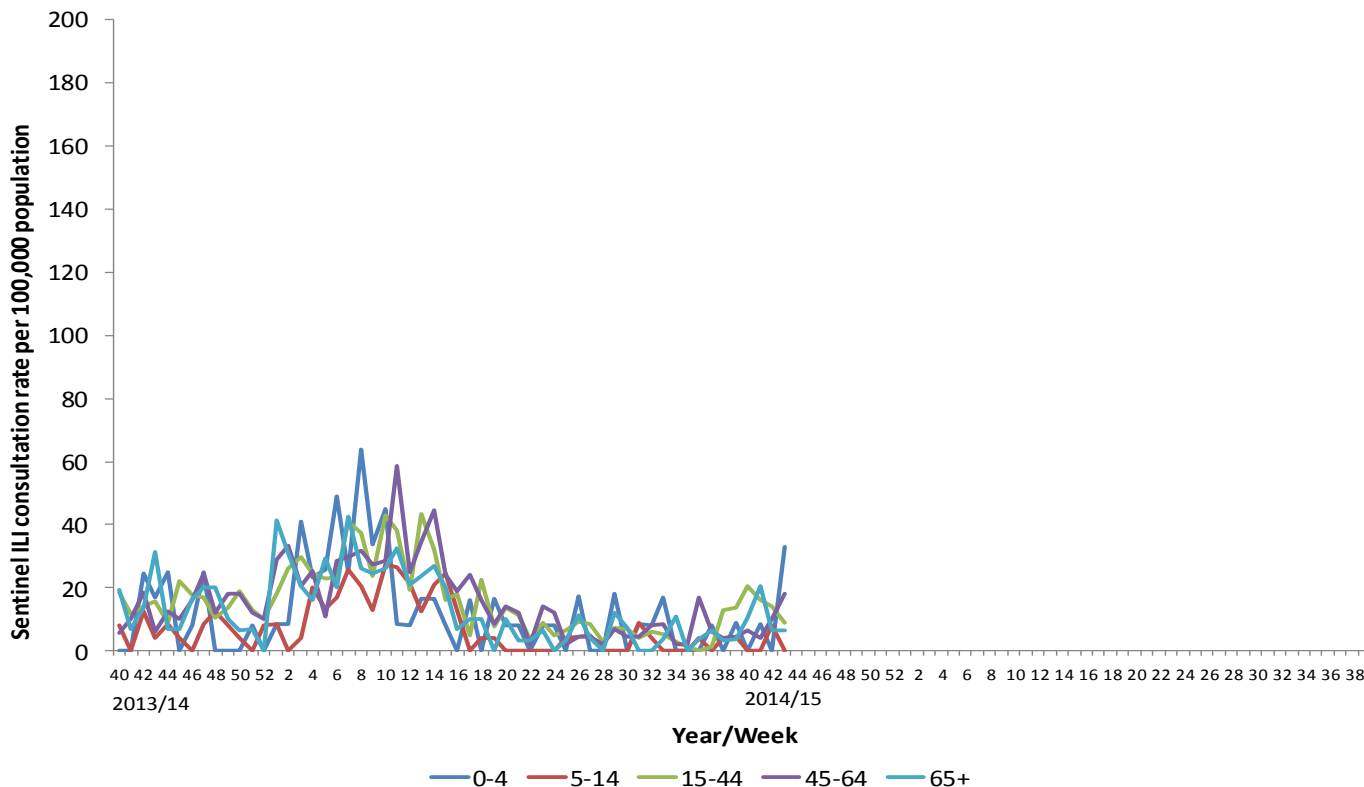


**Comment**

GP consultation rates remained low throughout weeks 42 to 43. In week 42 the GP consultation rate decreased from the previous week to 10.3 per 100,000 population and increased in week 43 to 11.3 per 100,000 population. The rate for week 43, 2014 is lower than the same week in previous years.

Rates remain well below the pre-epidemic Northern Ireland 2014/15 threshold of 52.0 per 100,000 population (Figures 1, 2 and 3).

**Figure 4. Sentinel GP age-specific consultation rates for flu/FLI from week 40, 2013**



**Comment**

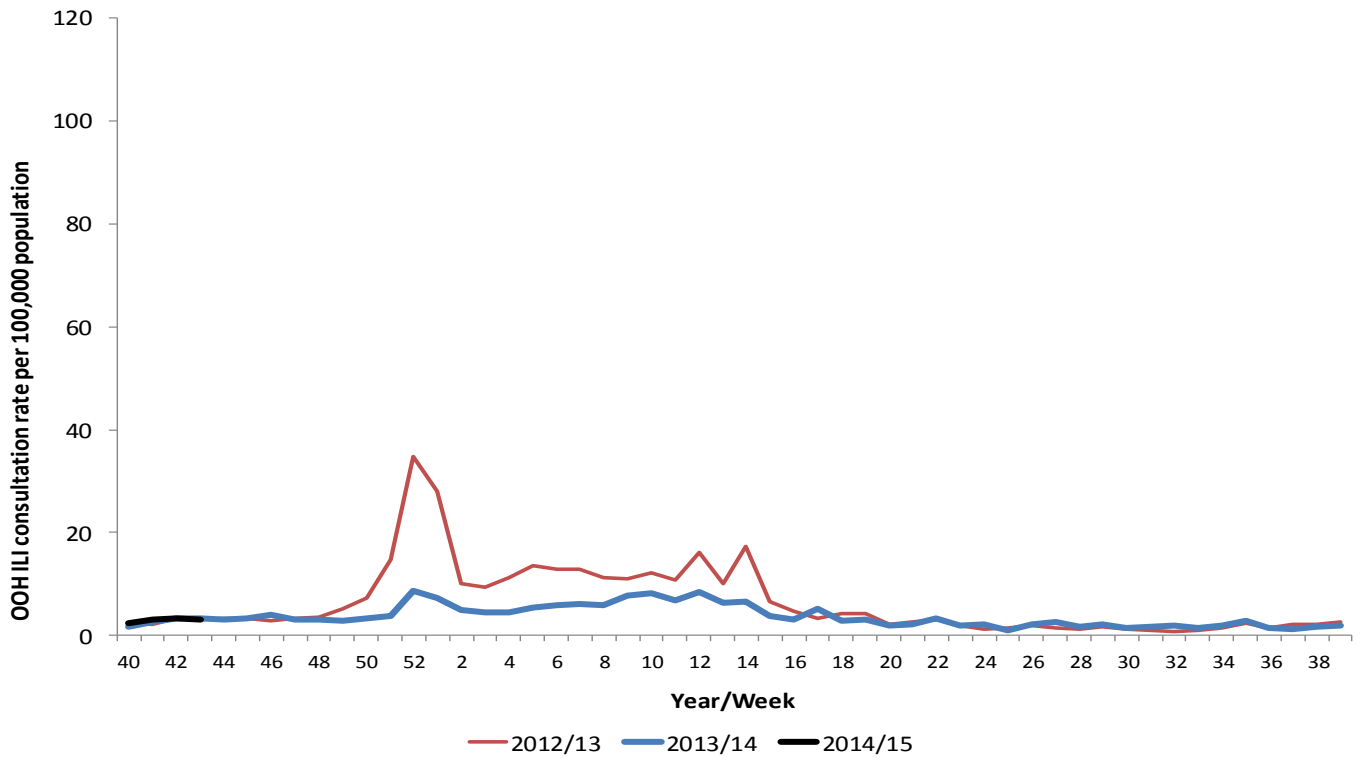
GP consultations remained low for all age groups in weeks 42 to 43, however small numbers may have contributed to some fluctuations in rates.

In week 42 the 5-14 and 45-64 year age groups showed an increase in consultation rates when compared with the previous week, while all other age groups displayed a decrease. In week 43, the 0-4 and 45-64 year age groups showed an increase in consultation rates, while rates among the 5-14 and 45-64 years age group decreased. Rates among those aged 65 years and over remained stable across the two-week period.

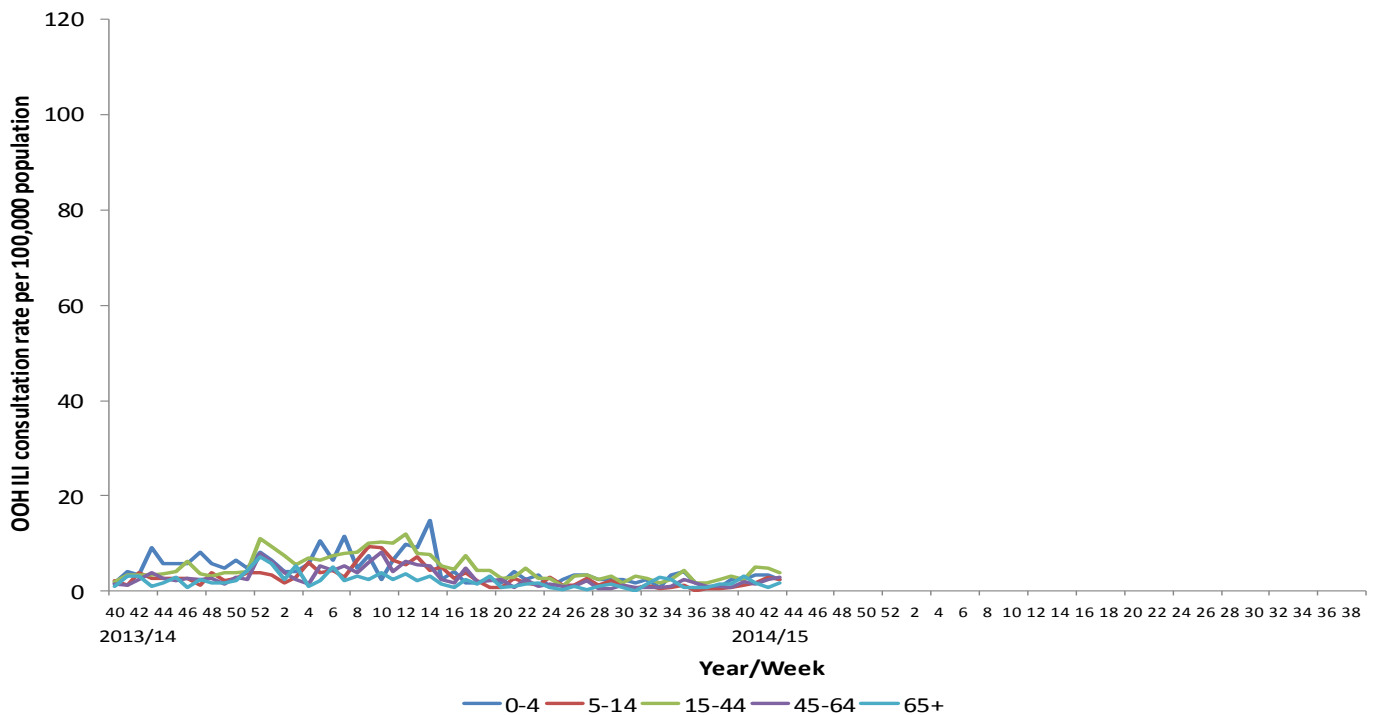
In general, GP consultation rates for combined flu' and flu'-like-illness in all age groups have fluctuated in recent weeks while remaining low. The highest age-specific consultation rate in week 43 2014, was in the 0-4 years age group (Figure 4).

## Out-of-Hours (OOH) Centres Call Data

**Figure 5. OOH call rate for flu/FLI, 2012/13 – 2014/15**



**Figure 6. OOH Call rates of flu/FLI by age-group from week 40, 2013**



### Comment

The OOH consultation rate for flu/FLI remained low throughout weeks 42-43, similar to previous years, at 3.3 and 3.1 per 100,000 population respectively. The OOH flu/FLI rate remained low in all age groups, again similar to the same period in 2013/14. In weeks 42 and 43, 2014 the rate steadily increased among the 45-64 years age group while rates among the 0-4 and 15-44, years

age groups steadily decreased. Rates among those aged 5-14 years and 65 years and over have fluctuated over the 2 week period, although this may be accounted for by small numbers (Figures 5 and 6).

## Virology Data

**Table 1. Virus activity in Northern Ireland, Week 42 - 43, 2014/15**

Source	Specimens Tested	AH3	A(H1N1) pdm09	A (untyped)	Flu B	RSV	Total influenza Positive	% Influenza Positive
Sentinel	0	0	0	0	0	0	0	0%
Non-sentinel	186	0	0	1	1	1	2	1%
<b>Total</b>	<b>186</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1%</b>

**Table 2. Cumulative virus activity in Northern Ireland, Week 40 - 43, 2014/15**

	AH3	A(H1N1) pdm09	A (untyped)	Flu B	Total Influenza	RSV
0-4	0	0	0	2	2	5
5-14	0	0	0	0	0	0
15-64	2	0	1	0	3	0
65+	2	0	0	0	2	0
Unknown	0	0	0	0	0	0
<b>All ages</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>7</b>	<b>5</b>

**Table 3. Cumulative virus activity, Week 40 - Week 43, 2014/15**

	Sentinel						Non-sentinel					
	Flu AH3	Flu A (H1N1) pdm09	A (untyped)	Flu B	Total Influenza	RSV	Flu AH3	Flu A (H1N1) pdm09	A (untyped)	Flu B	Total Influenza	RSV
0-4	0	0	0	0	0	0	0	0	0	2	2	5
5-14	0	0	0	0	0	0	0	0	0	0	0	0
15-64	0	0	0	0	0	0	2	0	1	0	3	0
65+	0	0	0	0	0	0	2	0	0	0	2	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>All ages</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>7</b>	<b>5</b>

### Note

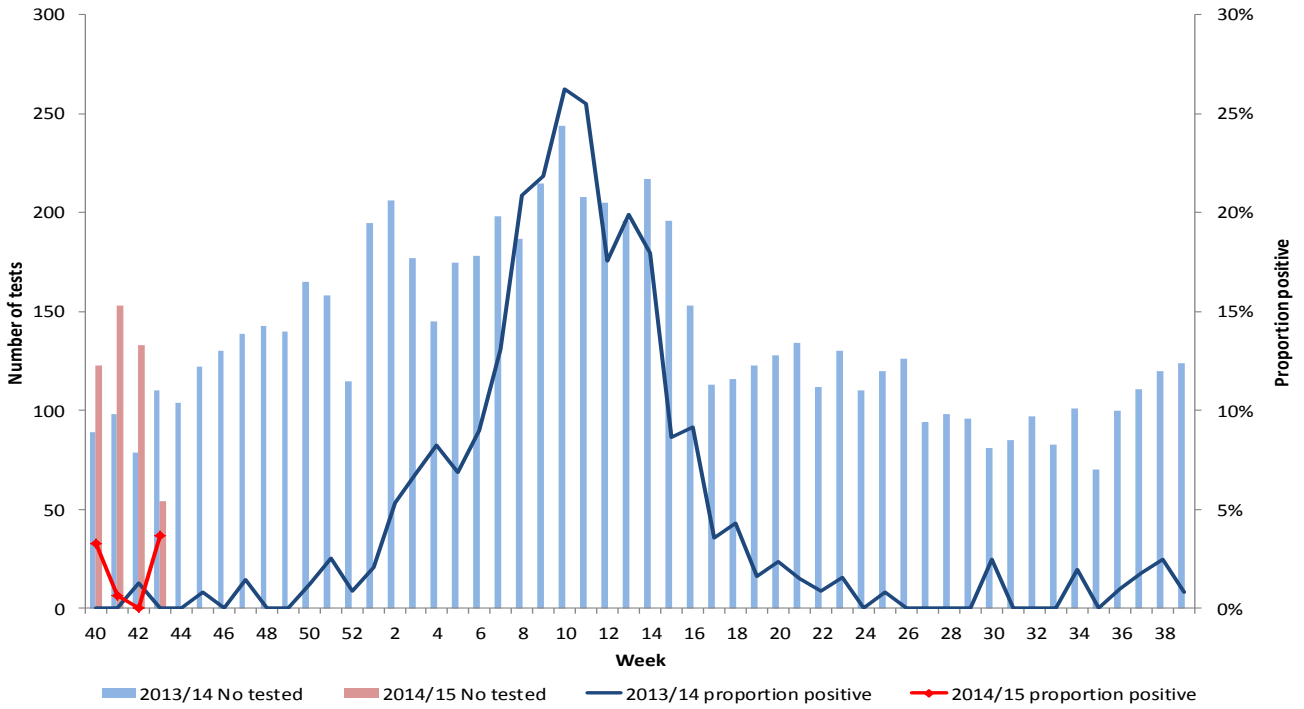
All virology data is provisional. The virology figures for previous weeks included in this or future bulletins are updated with data from laboratory returns received after the production of the last bulletin. The current bulletin reflects the most up-to-date information available.

Sentinel and non-sentinel samples are tested for influenza and for RSV. Cumulative reports of influenza A (untyped) may vary from week to week as these may be subsequently typed in later reports.

## Comment

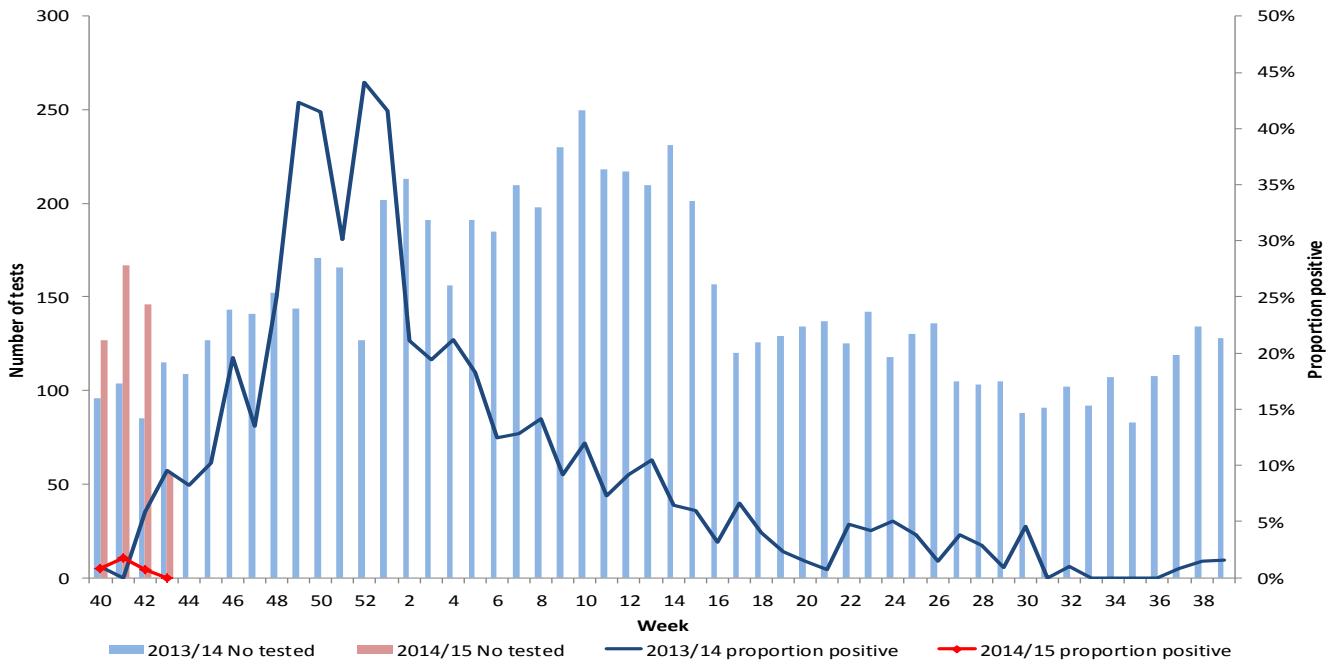
During weeks 42 to 43, there were 186 specimens submitted for testing, of which 1 was confirmed as influenza A (typing awaited) and 1 as influenza B, higher than the previous week and also than the same period last year. Positivity rates for influenza have remained low throughout the 2-week period (Figure 7).

**Figure 7. Number of samples tested for influenza and proportion positive, 2013/14 and 2014/15, all sources**



## Respiratory Syncytial Virus

**Figure 8. Number of samples tested for RSV and proportion positive, 2013/14 and 2014/15, all sources**



### Comment

There was one positive RSV detection during weeks 42 and 43 with positivity rates remaining low (Figure 8 and table 2).

## Influenza Vaccine Uptake

Vaccine uptake figures for 2014/15 will be reported in the bulletin later in the season.

## Emergency Department Syndromic Surveillance System

In weeks 42 and 43 there were fewer than five influenza-like-illness (ILI) attendances reported in EDSSS. Later in the season the bulletin will include a graphical representation of ILI attendances if numbers increase.

## ICU/HDU Surveillance

There were no admissions to ICU or deaths in ICU patients confirmed with influenza reported in weeks 42 and 43, 2014.

## Outbreak Surveillance

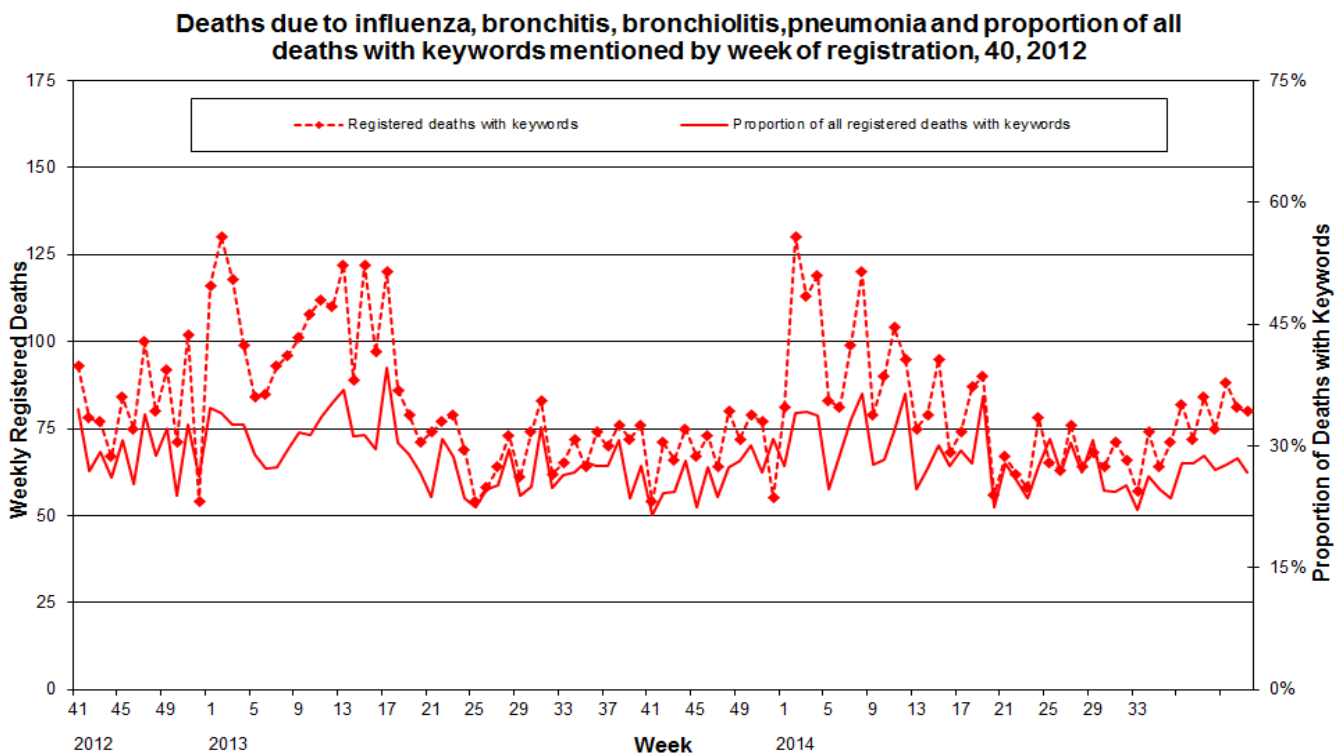
There were no confirmed influenza outbreaks reported in weeks 42 and 43, 2014.



## Mortality Data

Weekly mortality data is provided from Northern Ireland Statistics and Research Agency. The data relates to the number of deaths from selected respiratory infections (some of which may be attributable to influenza, and other respiratory infections or complications thereof) registered each week in Northern Ireland. This is not necessarily the same as the number of deaths occurring in that period. Searches of the medical certificates of the cause of death are performed using a number of keywords that could be associated with influenza (bronchiolitis, bronchitis, influenza and pneumonia). Death registrations containing these keywords are presented as a proportion of all registered deaths.

**Figure 9. Weekly registered deaths**



### Comment

The proportion of deaths related to respiratory keywords fluctuated across the 2-week period. During week 42, 2014 the proportion of registered deaths increased slightly to 29%, from 28% the previous week, however the proportion decreased to 27% in week 43, higher than the same period in 2013.

The number of registered deaths due to respiratory keywords decreased to 81 in week 42 compared with 88 in week 41. In week 43, 2014, there were 300 registered deaths of which 80 related to these specific respiratory infections.

### EuroMOMO

In weeks 42 and 43, no excess all-cause mortality was reported in Northern Ireland. This data will be presented in a chart later in the season.

## International Summary

### Europe

During the 2014 off-season period (weeks 21- 35), influenza viruses circulated with generally low intensity and occurred only sporadically in a small number of European countries: 4 influenza viruses were detected in sentinel sources.

During weeks week 21 – 35 the following were noted:

- Low intensity was reported by all countries submitting reports (15 to 19 depending on the week). Local or sporadic activity was reported by eight countries.
- Of 330 sentinel specimens tested across 14 countries, 10 were positive for influenza virus. Eight were influenza A viruses and two were type B Influenza.
- Nine hospitalised, laboratory-confirmed influenza cases were reported by two countries; six of these cases were admitted to intensive care units.

During the first week of the 2014-15 influenza season, there was no evidence of significant influenza activity in Europe.

[http://ecdc.europa.eu/EN/HEALTHTOPICS/SEASONAL\\_INFLUENZA/EPIDEMIOLOGICAL\\_DATA/Pages/Weekly\\_Influenza\\_Surveillance\\_Overview.aspx](http://ecdc.europa.eu/EN/HEALTHTOPICS/SEASONAL_INFLUENZA/EPIDEMIOLOGICAL_DATA/Pages/Weekly_Influenza_Surveillance_Overview.aspx)

### Worldwide (WHO)

As at 20<sup>th</sup> October 2014:

Globally, influenza activity remained low, with the exception of some tropical countries in the Americas and some Pacific Islands.

- In Europe and North America, overall influenza activity remained at inter-seasonal levels.
- In tropical countries of the Americas, influenza B co-circulated with respiratory syncytial virus (RSV).
- In Africa and western Asia, influenza activity was low.
- In eastern Asia, influenza activity in most countries remained low or decreased after some influenza A(H3N2) activity in August and September.
- In tropical Asia, influenza activity continued to decrease or remain low with influenza A(H3N2) predominant.
- In the southern hemisphere, influenza activity decreased in general except in several Pacific Islands where ILI activity remained high. In the temperate zone of South America, influenza-like illness (ILI) decreased and continued to be associated with RSV. Influenza A(H3N2) virus was the most frequently detected influenza virus. In Australia and New Zealand Influenza activity also decreased.
- The WHO recommendation on the composition of influenza vaccines for the southern hemisphere 2015 was announced on 25 Sept. The recommendation and associated technical report are posted at the WHO website:  
[http://www.who.int/influenza/vaccines/virus/recommendations/2015\\_south/en/](http://www.who.int/influenza/vaccines/virus/recommendations/2015_south/en/)
- Due to changes in data collection platforms, data from the WHO Regional Office for Europe are temporarily not available at global level. Those data will be uploaded to FluNet

and FluID as soon as possible. Information on European influenza activity can be found at <http://www.flunewseurope.org/>

• [http://www.who.int/influenza/surveillance\\_monitoring/updates/latest\\_update\\_GIP\\_surveillance/en/index.html](http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/index.html)

## Acknowledgments

We would like to extend our thanks to all those who assist us in the surveillance of influenza in particular the sentinel GPs, Out-of-Hours Centres, Regional Virus Laboratory, Critical Care Network for Northern Ireland, Public Health England and NISRA. Their work is greatly appreciated and their support vital in the production of this bulletin.

## Further information

Further information on influenza is available at the following websites:

<http://www.fluawareni.info> Now on Facebook (Flu Aware NI)

<https://www.gov.uk/government/organisations/public-health-england>

<http://www.publichealth.hscni.net>

<http://www.who.int>

<http://ecdc.europa.eu>

<http://euroflu.org>

Flusurvey, an online flu surveillance system run by the PHE and London School of Hygiene and Tropical Medicine was launched in 2013/14 and will continue into 2014/15. For further information and please see the [Flusurvey website](#).

## Detailed influenza weekly reports can be found at the following websites:

Northern Ireland:

<http://www.publichealth.hscni.net/directorate-public-health/health-protection/seasonal-influenza>

England, Scotland and Wales:

<https://www.gov.uk/government/collections/seasonal-influenza-guidance-data-and-analysis#epidemiology>

Republic of Ireland:

<http://www.hpsc.ie/hpsc/A-Z/Respiratory/Influenza/SeasonalInfluenza/Surveillance/InfluenzaSurveillanceReports/>

For further information on the Enhanced Surveillance of Influenza in Northern Ireland scheme or to be added to the circulation list for this bulletin please contact:

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